

Why museums matter: report from the workshops 14-15 November 1999 'Increased cooperation between bird collections'

by Joanne H. Cooper & Frank D. Steinheimer

The post-conference workshops were primarily aimed at museum workers directly involved in curation and collections management, and were attended by about 85 delegates from more than 50 institutions in 22 countries. As originally intended, the main theme of the workshops was increased cooperation between bird collections, particularly within Europe, but as with the main meeting this was often overlain with a far more global perspective. Four sessions were spread over two days, with a largely free-form structure allowing wide-ranging and flexible discussions of issues raised in the foregoing conference or during the workshops themselves. Rather than consider each session individually, this report aims to provide an overview of the workshops as a whole, and is based around the key subjects that emerged.

Increasing cooperation

The value of cooperation and collaboration was emphasised throughout the conference and a definite eagerness for developing greater cooperative links both at European and global levels was clearly demonstrated during the workshops. Fundamental to achieving this aim is communication, and the basic currency of communication is information. At its core, this information begins simply as resources, places and people: what, where, who? An important step in compiling and disseminating such basic information is the directory presented by Kees Roselaar in this volume (Roselaar 2003), unveiled at the workshops. This directory is based mainly on the responses of curators to a questionnaire about their collections, combined with previously published data. Initially, Roselaar intended to contact only collections with over 20,000 bird specimens, but as many smaller collections hold valuable material in the form of types or extinct species, they too made it into the list. However, as a printed publication, the scope of the directory was inevitably constrained, but there was some enthusiasm for developing a version of it on the internet. Potentially, institutions would be able to update their entries directly, and size limits would be effectively removed, allowing any institution with a bird collection to add to it—even school collections, which might contain country or county records (see Hudecek *et al.* 1999). Recognising this, a new project group, 'Museums Ornithology', has been established with the German Ornithologists' Society with the aim of compiling the data of even the tiniest bird collections in Germany.

Means of making and maintaining contact were also considered. Apart from the diversity of the conference and workshop delegates, and the resulting opportunities for networking (Cooper 2000), another valuable quality was the meeting's largely

informal nature, which positively encouraged contact. As such meetings have until this event been relatively infrequent occurrences, there is both a niche and a need for alternative, ongoing means of contact. To this end, e-mail forums were discussed and met with considerable interest. A US-based bird collections forum exists in the form of AVECOL, used primarily by curators. However, it was felt that a new European-based forum would be appropriate and useful, and the task of creating one was undertaken by Jörn Scharlemann with the assistance of Chris Sleep and James Van Remsen. Hosted by The Natural History Museum, London (BMNH), the electronic Bulletin for European Avian Curators (eBEAC) is now fully functioning (see below, under 'eBEAC', for further information).

The basic foundations for increasing cooperation seem to have been successfully laid. However, as of August 2002, relatively few messages had been sent on eBEAC and there is little ongoing discussion using this new forum. The trick now must be to maintain the momentum gathered during the workshops and build upon it.

Inventories

Discussions surrounding Roselaar's list and its presentation of broad collections statistics developed to encompass the possibilities of more detailed international collections inventories, catalogues or databases and their cooperative compilation, aiming ultimately at publication on the internet. It was generally agreed that an inventory project of some kind would be an excellent practical expression of the cooperation that the conference and workshops were hoping to foster.

Specifically, discussion concentrated on two forms of catalogue/database, (1) types and (2) extinct and endangered (E&E), both of which were considered to have their advantages and disadvantages as potential projects.

As the basic defining units of biodiversity, type specimens carry a greater systematic importance than E&E material, and so should arguably take priority. Additionally, it was pointed out that the world type list is considerably more static than the world list of E&E birds, which is unfortunately steadily increasing. However, assembling a type catalogue even for an individual collection is not an easy task, given the taxonomic complications this can involve, for example in synonymies. However, to an extent, a type catalogue would be self-correcting as information accumulated and could in fact open up discussion between institutions, probably providing fresh insights into specimens' status.

Rémy Bruckert, Muséum National d'Histoire Naturelle (MNHN), in cooperation with the Natural History Museum (NHM), American Museum of Natural History (AMNH), Edward Dickinson and Norbert Bahr, has now taken on this challenge and is preparing a type- and taxonomical database to house the world's digital avian type catalogue (Bruckert in press). Obviously a great help in amassing such an amount of data is the fact that several institutions already have published type catalogues available, covering some of the largest type collections in the world, amalgamation of which has proved to be an excellent foundation for this project.

Fewer institutions have an E&E catalogue available, although it emerged that a limited attempt at a European E&E online database has been made, based on data from eight collections around Europe. This is the Extinct and Vanishing Animals Project (EVAP), coordinated by Professor Marco Vannini of the Zoological Museum of the University of Florence using EU funding (see 'Websites' for address). Whilst a separate project is probably appropriate, EVAP does give ideas upon which to build.

A fundamental starting point for devising any E&E catalogue is a species list. The Bird Group at NHM, in consultation with BirdLife International, have drawn up such a list, based on the recently published landmark volume *Threatened birds of the world* (BirdLife International 2000) (Adams *et al.* 2003, this volume). It is hoped that initially this list will be of assistance to institutions wishing to collate their own E&E catalogues, with the compilation of worldwide databases a longer-term prospect.

The talks surrounding the assembly and publication of inventories raised a number of issues that any similar project will be likely to face. After the complexities associated with compilation, a particular concern is maintenance: how should such inventories be kept updated? Enthusiasm for the principle of global inventories was considerable but at times guarded as the scale of the logistics involved became apparent. It must be said that there is considerable responsibility in taking on such a task, and concerns such as the availability of personnel and their time and, inevitably, funding must be acknowledged and addressed. Each institution that becomes involved will have to face these issues, but especially those contemplating the initial steps of creating their individual E&E or type catalogues, possibly from scratch.

Collections and curation

These workshops were not a forum for questioning whether or not to collect birds (for which see Remsen 1995, Collar 2000); rather they were used to examine how collecting, particularly within Europe, could or should be carried out in the future. Active collecting is now pursued mainly by North American institutions; only a very few European museums are able to carry out some collecting, and little of that is of their own national avifauna. Arguably, the most important impact this decline has on collections is the significant gaps that are opening up in specimen time-series, which not only has implications for long-term studies (e.g. Green & Scharlemann 2003, this issue), but also affects interpretation of other data, such as distribution patterns.

Whilst it would be possible for curators in non-collecting institutions to gain experience of collecting through participating in expeditions run by collecting institutions, this does not address the key problem of time gaps in European avifaunas or the obstacles of public opposition. There appeared to be a groundswell of opinion at the workshops that it is perhaps time to broach these issues with government and conservation bodies.

For institutions wishing to add objectively to their collections, in addition to more opportunistic sources such as donation, specimen exchanges with other

collections can be extremely valuable. Exchanges are commonly based on unprepared frozen material, and can be especially useful for acquiring anatomical specimens, which are regaining recognition as key material for taxonomic research (Livezey 2003 and Olson 2003, this issue). Institutions that may not maintain anatomical collections should be aware that specimens they might normally discard could be of considerable interest to somewhere else. Another part of the appeal and strength of exchanges is that almost any specimen may be of value to the right collection. One institution's common birds are often another's rarities, so if facilities allow it can be worth retaining material specifically with exchanges in mind. Freezer inventories are generally a fundamental starting point in setting up exchanges; after that it is a question of communication, and it has been found that email forums can be effective for this.

There is a perceived decline in preparation skills and expertise, possibly linked to the decline in collecting but probably also owing to staffing reductions and perhaps to the fact that workers may not be well-placed to gain experience of new or unfamiliar methods. Increasingly, there is more emphasis on multi-preparations, where parts of a single specimen are preserved in several different ways, which can be as simple as preserving a spread wing on a skin specimen. Additionally, the value of incidental material associated with specimens, such as stomach contents, frozen tissue samples, avian parasites or even sound recordings (see Alström & Ranft 2003, this issue), is gaining recognition and can build into an impressive research resource. It was felt that technical manuals, including videos, would be very welcome, and that some form of preparation workshop might be appropriate at subsequent meetings.

Another point of discussion was the increasing numbers of DNA sampling requests for museum specimens. It seems that relatively few institutions have a set policy governing destructive sampling but, as techniques develop not only for DNA but also for chemical sampling or anatomical analyses, such protocols will be essential to protect collections. As an example, the destructive sampling protocol of the Division of Birds, National Museum of Natural History (USNM), Smithsonian, is available online (for addresses, see below).

Going global

A subject frequently returned to throughout the conference and workshops was information technology and its huge potential as a means of disseminating and analysing collections data. This summary is not the place to attempt a detailed review of the complex, and occasionally controversial, discussions that developed, but it is abundantly clear that the opportunities presented by the internet and other information technology are impressive to say the least, culminating in the concept of a virtual world museum (see, e.g., Peterson *et al.* 2003). However, tools this powerful must be handled with extreme care and it must be said that the opportunities are not necessarily all positive. Basic issues surrounding the mass release of data, particularly in catalogues or inventories, that emerged in the course of the workshops included:

funding of data capture/publication and subsequent charging; intellectual rights of institutions to their collections data and continued control of them; rights of the specimen's nation of origin to the data; implications of an increasing perception (rightly or wrongly) of specimens as economic property (see Graves 2000 for more). Once data have been released, the consensus is that it may be difficult to backtrack and reclaim them in the future. If this is so, then decisions taken now must be made very carefully and projects such as the type and E&E catalogues may well prove to be important testing grounds.

The future?

As the first meeting of their kind the workshops were rated a success, achieving their aim of opening up new lines of communication between workers in bird collections and encouraging new levels of cooperation. Suggestions for increasing cooperation, such as the creation of eBEAC, were met with enthusiasm, with the overall verdict that yes, we want more interaction, and future workshops of a similar nature should take place. The Second European Symposium 'Bird Collections in Europe: The Challenges of Mutual Cooperation' has now been held, from 9 to 12 November 2001 in Bonn, Germany, and was also well attended. The Alexander Koenig Research Institute and Zoological Museum (ZFMK), Bonn, invited speakers for lectures covering bird collections and biodiversity, the promotion of ornithological science, sharing databases, the history and development of individual collections and other topics. Detailed proceedings of this second conference will be published in due course (Rheinwald in press).

However, these meetings will come but once a year at most, and nurturing our new cooperative opportunities will need more attention than that. Continuing the process begun at these workshops needs input from individual workers, whether sitting on steering committees, initiating specimen exchanges or simply posting a message on eBEAC. We have started something at these conferences and workshops—now let us see how far we can take it.

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Websites

- Extinct and Vanishing Animals—A European Natural History Museums Databank: <http://www.specola.unifi.it/eva.htm>
- Division of Birds, National Museum of Natural History, Smithsonian Institution—for types catalogue, loans and destructive sampling protocols: <http://www.nmnh.si.edu/vert/birds>

eBEAC: the Electronic Bulletin for European Avian Curators

eBEAC is primarily intended for curators and collection managers of European museums, but those working elsewhere in curation or management of bird collections are not excluded.

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